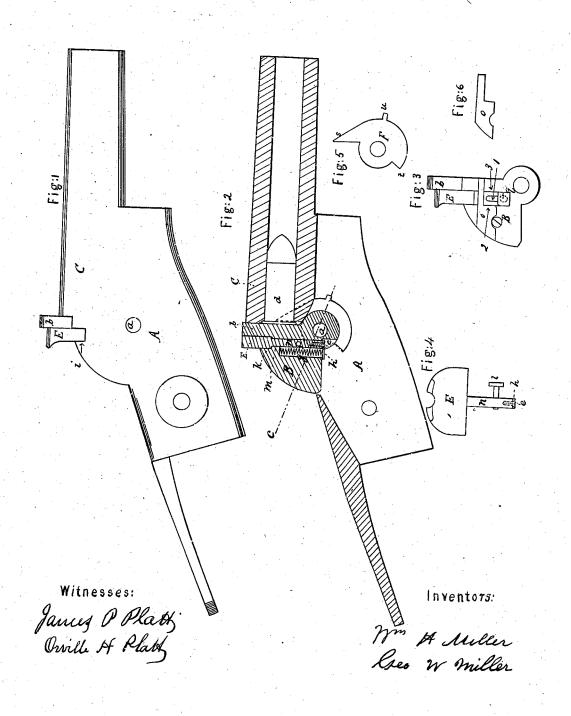
PATENTED DEC. 26, 1865. LLER.

W. H. & G. W. MILLER. BREECH LOADING FIREARM.



UNITED STATES PATENT

WILLIAM H. MILLER AND G. W. MILLER, OF WEST MERIDEN, CONN.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 51,739, dated December 26, 1865.

To all whom it may concern:

Be it known that we, WM. H. MILLER and GEO. W. MILLER, both of West Meriden, county of New Haven, and State of Connecticut, have invented a certain new and useful Improvement in Oscillating Breech Pieces for Fire-Arms; and we do hereby declare that the same is represented and described in the following specification and drawings; and to enable others skilled in the art to make and use the same we will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement will be understood from the specification and drawings,

in which-

Figure 1 is a side view. Fig. 2 is a sectional side view. Figs. 3, 4, 5, and 6 show detached parts or portions thereof.

A is a case which connects the stock and barrel, and in which is arranged the mechan-

ism for operating this arm.

B is an oscillating breech-piece, hung and working upon the pin a, so that when the face plate b thereof is up against the breech end of the barrel C it is in a line nearly at right angles with the center line of the barrel, and when it (the face-plate b) is thrown back after firing it will occupy a position nearly as shown by the line c, thus affording perfect facility for inserting, extracting, or expelling the cartridge d in the breech end of the barrel, and exposing to view the whole range of the bore of the barrel.

On the back side of and in a parallel line with the face-plate b is provided a groove, k, and an orifice, m, into which is fitted a spring thumb-latch, E, which works into a depression, i, formed in the edges of the case A, the object of which is to firmly lock the oscillating breech-piece against the rear end of the barrel. This thumb-latch E is provided with a stem, n, which is fitted into the orifice m, and upon the lower end of said stem is secured (by a pin or screw, e) a step, h, to receive the end and pressure of the spring g, to hold the latch E in a locked position.

o is a sliding bar, arranged in the side of the breech-piece B, for the purpose of receiving and transmitting the blow from the hammer to the fulminate of the cartridge.

r is a detent, the stem of which passes through

a slit or mortise, 1, (in the breech-piece,) into the stem n of the thumb-piece E, the object of which is to prevent the possibility of accidental discharge of the cartridge by means of the bar o, except when it receives its impetus from the hammer, because when the thumb-latch is lifted the detent will rise between the shoulder 2 and the side of the depression 3, which effectually prevents the transmission of a blow, and will remain in that position until the latch is again down firmly in its depression or catch i, and then only from a blow directed from an instrument quite small at the point of contact at or upon (within the small space occupied by the end of the sliding bar o) the end of the sliding bar o.

F is a shell-discharger arranged upon the

central pin, a

When the cartridge is inserted into its place in the breech end of the barrel the front side of the finger s will be against the inside of the flange of said cartridge. After the explosion, and on opening or drawing back the face-plate b, the under side of the breech piece B will strike the projection t, and cause the finger s (of the cartridge extractor F) to push the shell from the barrel. The outward motion of said finger's is limited by the action or means of the stop-pin u.

Thus we are enabled to simplify the construction, produce greater firmness, efficiency, and durability, and less liability of accident, and at the same time lessen the cost of manu-

facture.

We believe we have thus shown the nature, construction, and operation so as to enable others skilled in the art to make and use the same.

What we claim, therefore, and desire to se-

cure by Letters Patent, is—
1. The latch E, arranged and operating in combination with the face-plate b, oscillating breech-piece B, and catch i, substantially as described.

2. The detent r, in combination with the bar o and breech-piece B, constructed and operating substantially in the manner and for the purpose described.

WM. H. MILLER. [L. S.] GEO. W. MILLER. [L. S.]

Witnesses: JAMES P. PLATT, ORVILLE H. PLATT.